EEE MADISON SECTION NEWSLETTER

VOLUME 12, NUMBER 1 SERVING IEEE MEMBERS OF SOUTH CENTRAL WISCONSIN

Trends in Cable Rejuvenation

Date/Time:	Thursday, January 15, 2009, 11:45 AM - 1:00 PM
Speaker:	Glen J. Bertini, CEO, Novinium, Kent, WA
Location:	Rocky Rococo's Pizza, 7952 Tree Lane (Madison Beltline Hwy. at Mineral Pt. Rd.),
	608.829.1444
Menu:	Pizza buffet, salad and soft drinks (cost \$10.00, free for UW-Madison student members)
RSVP:	by January 12th to Shazia Ahsan via e-mail (sahsan@ieee.org) or call 906.370.2958

Non-member guests are always welcome!

Glen will talk about the historical development and recent trends in Cable Rejuvenation. Using the techniques of Cable Rejuvenation, underground power system cables can have their useful life extended considerably, through the chemical treatment of the cable insulation. His talk will include a discussion of:

- Why do cables fail?
- Injection process description
- Rejuvenation chemistry
- + Short- and long-term cable reliability
- Green benefits of rejuvenation

Glen spent the last two decades working with cable rejuvenation technology beginning with its development at Dow Corning in 1985 and continuing through its commercialization and growth to over 75 million feet of cable rejuvenated and over \$1 billion in capital saved so far. He is the world's foremost authority on cable rejuvenation with over 30 articles published on the subject, a total of 16 patents on cable rejuvenation and related technologies and 7 more pending. He was the 1992 corecipient of the prestigious R&D 100 award for cable rejuvenation.

Glen holds a B.S. in Chemical Engineering from Michigan Technological University; he is a Fellow of the IEEE, a voting member of the ICC, and a licensed professional engineer.

Digital Video Carrier Methods for HD & SD Content

Date/Time:	Thursday, March 19, 2009, 11:45 AM - 1:00 PM
Speaker:	Robert J. Schaeffer, President-Senior Technologist, Technology Planners, Fond du
	Lac, WI
Location:	Rocky Rococo's Pizza, 7952 Tree Lane (Madison Beltline Hwy. at Mineral Pt. Rd.),
	608.829.1444
Menu:	Pizza buffet, salad and soft drinks (cost \$10.00, free for UW-Madison student
	members)
RSVP:	by March 16th to Shazia Ahsan via e-mail (sahsan@ieee.org) or call 906.370.2958



Non-member guests are always welcome!

This talk will cover the various delivery technologies that are in common use to provide digital video: Over the air DTV; telephone based copper technologies of DSL, VDSL, and DSL2+; Fiber to the home PON concepts; and the CATV/HFC coaxial delivery model. The above technologies will be described in a briefing overview format. The central take away will be an appreciation of how varied technology carriers distribute digital video content.

Robert founded Technology Planners, an engineering and consulting firm, serving as President and Senior Technologist, in 1996. He is the chief consultant for optical, digital, and RF systems. He also heads the design team, researching and applying new technologies. Technology Planners focuses on providing guidance and assistance to owners and operators of broadband networks.

Robert has spent the past 35 years in the communications industry. For 23 years he served as Vice President of Engineering at Star Cablevision Group of Fond du Lac, Wisconsin. While there, he designed, built, and managed 400 cable television systems serving communities



JANAUARY 2009



Upcoming 2009 Short Courses for Engineers and Other Technical Professionals

- The Engineer in Transition to Management January 26–28, 2009 in Las Vegas, NV
- Introduction to Planning and Designing Fiber to the Premises January 27–28, 2009 in Las Vegas, NV
- Electrical Grounding of Communication Systems March 2–4, 2009 in Las Vegas, NV
- Understanding and Troubleshooting VoIP Networks March 3–4, 2009 in Las Vegas, NV
- Planning and Implementing Microwave Radio for Next Generation Networks March 4–6, 2009 in Las Vegas, NV

For further information...

Web: epd.engr.wisc.edu or E-mail: danbeck@engr.wisc.edu College of Engineering Department of Engineering Professional Development

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Robert is a lifetime member of the Society of Cable Telecommunications Engineers (SCTE). He was a member of the technical advisory board at Cable Labs. He is a member of the Northeast Wisconsin section of IEEE, and has worked closely with many manufacturers. Former Wisconsin Governor, Tommy Thompson, appointed Robert, with confirmation by the State Senate, to sit on the board of directors for the Wisconsin Advanced Telecommunications Foundation (WATF) from 1995 to 2001.

Congratulations to New IEEE Fellows

Congratulations to the following IEEE Madison Section members who are in the 2009 Class of Newly Elevated Fellows :

- Susan C. Hagness, University of Wisconsin-Madison for contributions to time-domain computational electromagnetics and microwave medical imaging.
- *Parameswaran Ramanathan,* University of Wisconsin-Madison for contributions to real-time systems and networks.

For immediate release

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UWIG Announces Application Guidelines for its Scholarship Program

The Utility Wind Integration Group (UWIG) Board of Directors decided last August to support the education of students enrolled in accredited college or vocational schools in programs related to power engineering, wind energy, or the maintenance of wind turbines. To this end, we announced a scholarship program. To be eligible for scholarship assistance, a student must be currently enrolled at an accredited trade school or college in the United States or Canada in a field of study that could lead to a career related to utility power engineering or operation and maintenance of utility-scale wind equipment.

UWIG may award up to three scholarships each year. Up to two (2) \$2,000 scholarships will be granted to students enrolled in an accredited engineering school who are pursuing a career in power engineering with a focus or major on wind generation, and up to one \$1,000 scholarship to a student enrolled in an accredited wind technician program. The scholarships cover a single academic year and are not renewable. The \$2000 scholarships for the 2009-2010 academic term will be targeted towards students enrolled in undergraduate programs. Note that the schools must be in the United States or in Canada. We will not accept applications from students enrolled in graduate programs or in schools outside the US or Canada.

Application instructions and the application form can be found on the UWIG web site at http://www.uwig.org/scholarshipprogram. html

The application deadline is February 16, 2009.

IEEE Madison Section 100 Years Old in 2009

We've been notified by the IEEE that the IEEE Madison Section will turn 100 years old in 2009. The Section will be receiving a banner and a recognition letter from the IEEE President to celebrate our 100th anniversary. In light of this occasion, we have been asked to submit a brief history and/or background information about the Section. Since none of us have been members of the Section for 100 years (at least I hope no-one has!), we'd like to ask you as members to help us compile a history of the Section. Some of the specific things we'd like to know are:

- Who initiated the Section?
- What have been the highlights of the Section? For example, conferences we've sponsored, workshops we've hosted, prominent speakers, etc.
- Who were the officers of the Section over the years?
- Where has the Section held its meetings?

As you can probably guess, we have a reasonable amount of information about the last 10-15 years simply based on the newsletter and meeting archives on the website.

Please send any information you have about the Section to me, Craig Heilman, at <cheilman@ieee.org>.

Thank you!

Craig Heilman

IEEE Madison Section Newsletter Editor/Webmaster

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IEEE Madison Section Elections

At the January 2009 monthly meeting, the IEEE Madison Section will conduct its annual officer elections prior to the technical presentation. The positions include chair, vice-chair, secretary, treasurer, and multiple member-at-large positions. Job descriptions can be found online at <http://www.ieee.org/web/geo_activities/units/Resources/Officer_Training/job-desc.html>. Nominations may be made via e-mail to the one of the nominating committee members: Sandy Rotter, rotter@ieee.org or Clark Johnson, clarkjohnson@cpinternet. com. Additional candidate nominations are welcome and encouraged for all positions.

Your help is needed! Remember that this is a volunteer organization. Being an officer does not require a large time commitment but some of us are ready to retire after many years of service!

The nominations to date include:

Chair: Vice-Chair: Secretary: Treasurer: Mem. at Large: Mitchell Bradt

YOUR NAME HERE! Dennis Bahr David Marca Shazia Ahsan

Mem. at Large: Clark Johnson Mem. at Large: Sandy Rotter





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Our members have professional interests in computers, power engineering, signal processing, communications, industry applications and a number of other technical fields.

For more information, contact Mitch Bradt at 608.263.1085 or bradt@wisc.edu.

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